Appendix C
Correlated PM_{10} Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds[1] and PM_{10} concentrations at select monitoring sites within the Salton Sea Air Basin on August 18, 2014. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SELECT SITES
FIGURES C-1 to C-2)

FIGURE C-1
NILAND PM_{10} CONCENTRATIONS AND WIND SPEED CORRELATION

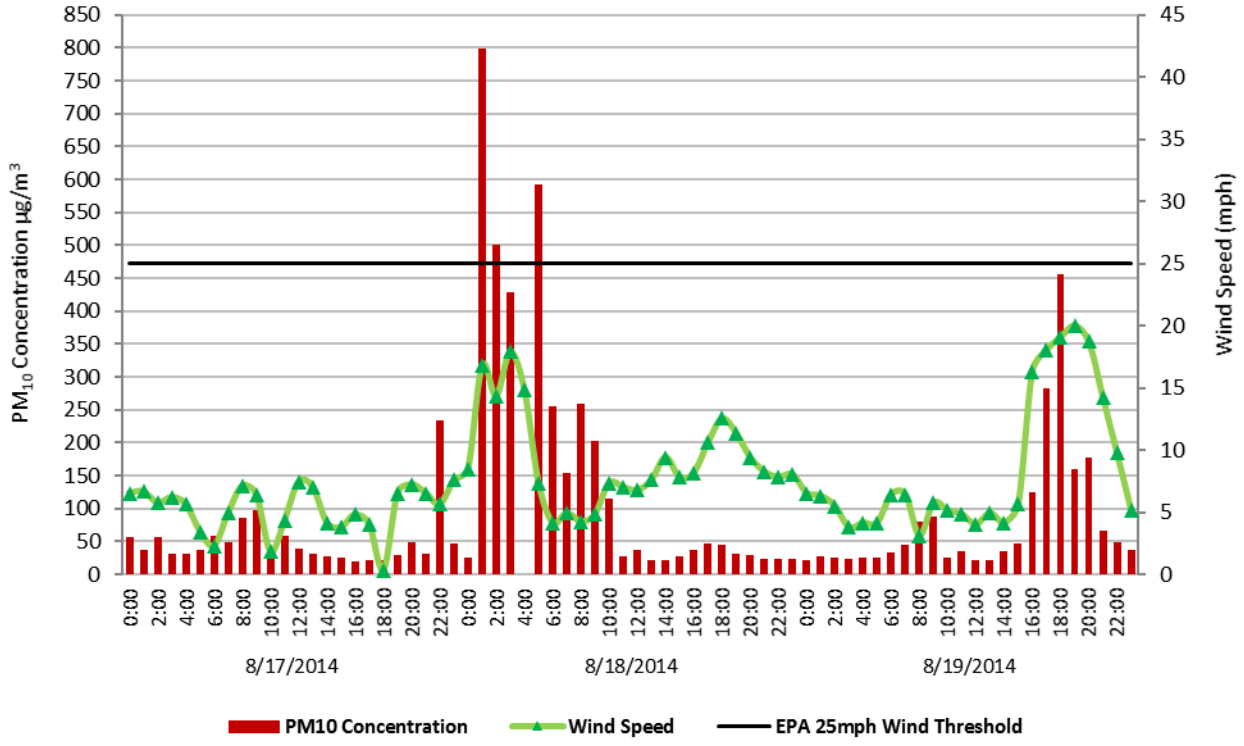


Fig C-1: Wind speeds at Niland during the early hours of August 18, 2014 were less than at upstream stations. This contributed to the saturation of particulate matter onto the air quality monitor, resulting in an exceedance at Niland. Wind and air quality data from the EPA's AQS system

[1] National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); https://w1.weather.gov/glossary/index.php?letter=w

FIGURE C-2
BRAWLEY PM_{10} CONCENTRATIONS AND WIND SPEED CORRELATION

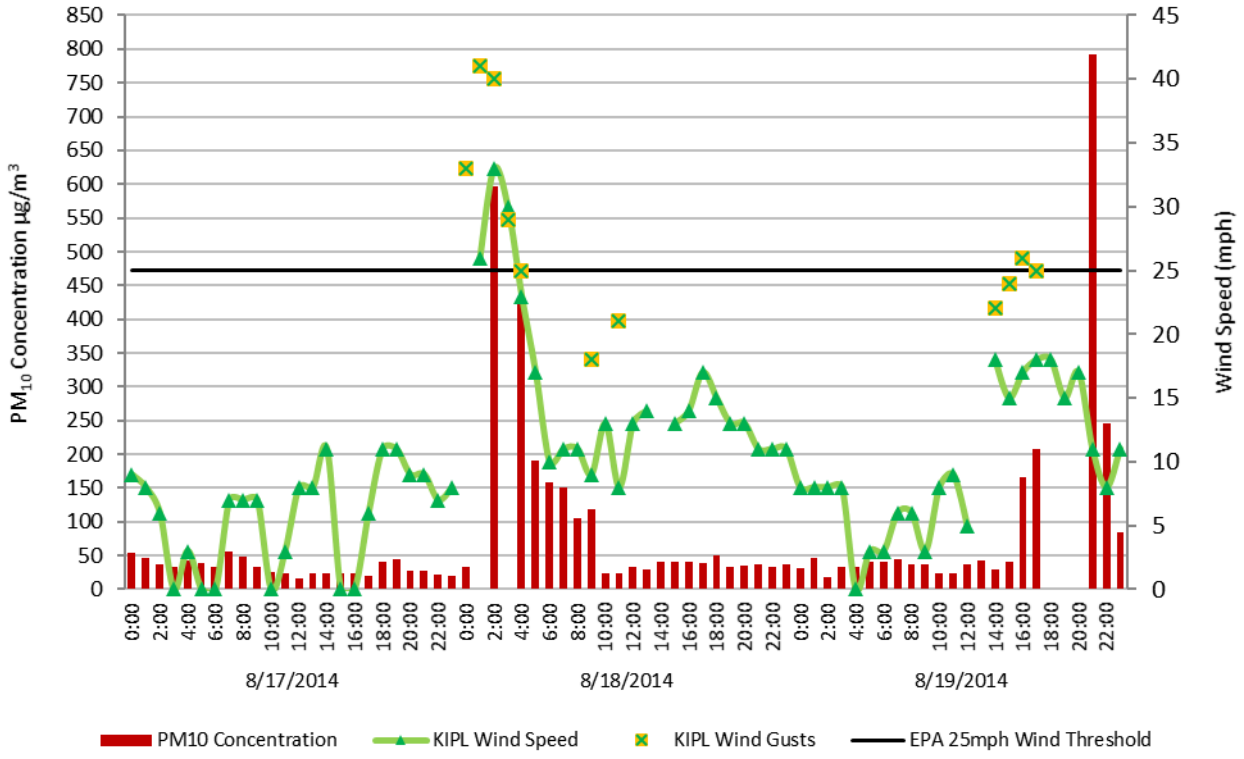


Fig C-2: Data was absent for two hours at Brawley, otherwise the site likely would have measured an exceedance. Imperial County Airport (KIPL) is the closest wind station to Brawley

RIVERSIDE COUNTY MONITORING SITES

FIGURE C-3
INDIO (JACKSON ST) PM_{10} CONCENTRATIONS AND WIND SPEED CORRELATION

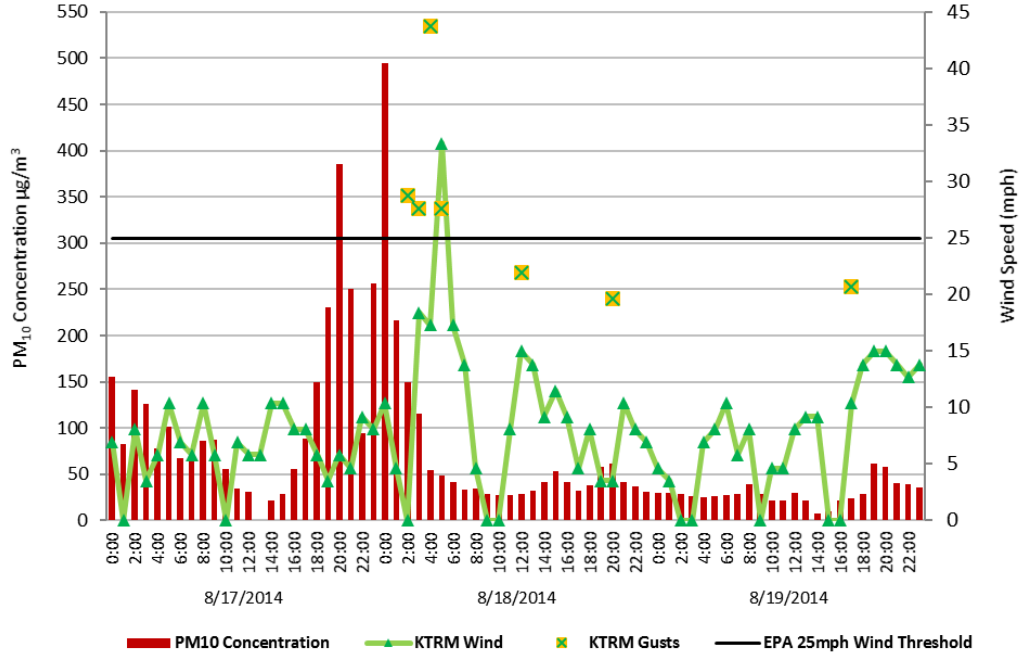


Fig C-3: Wind data is from Jacqueline Cochran Airport (KTRM)

FIGURE C-4
PALM SPRINGS FIRE STATION PM_{10} CONCENTRATIONS AND WIND SPEED CORRELATION

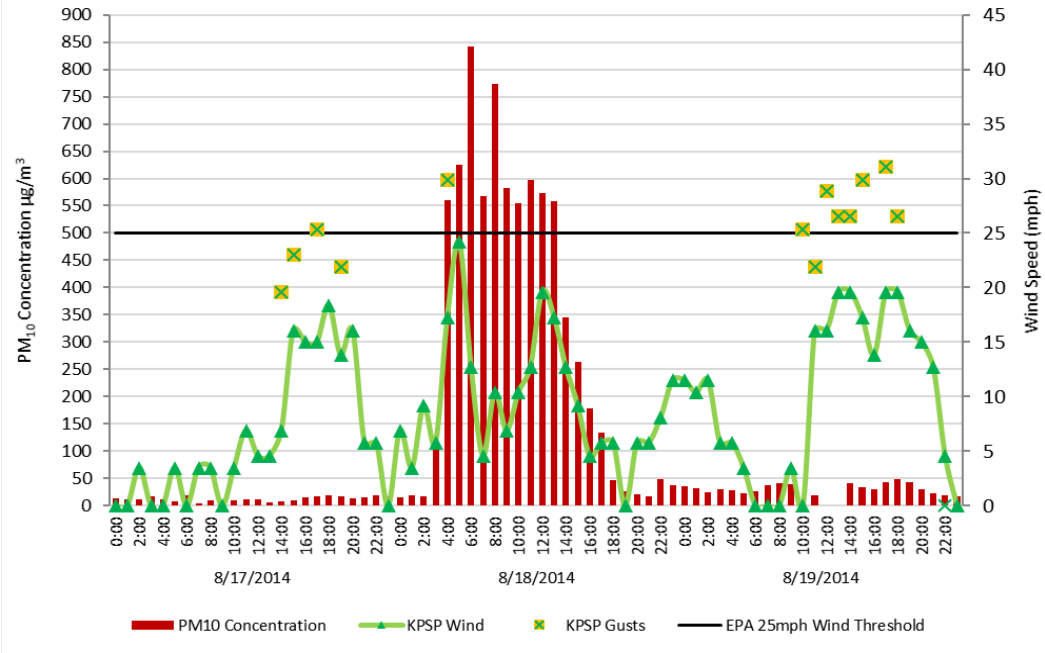
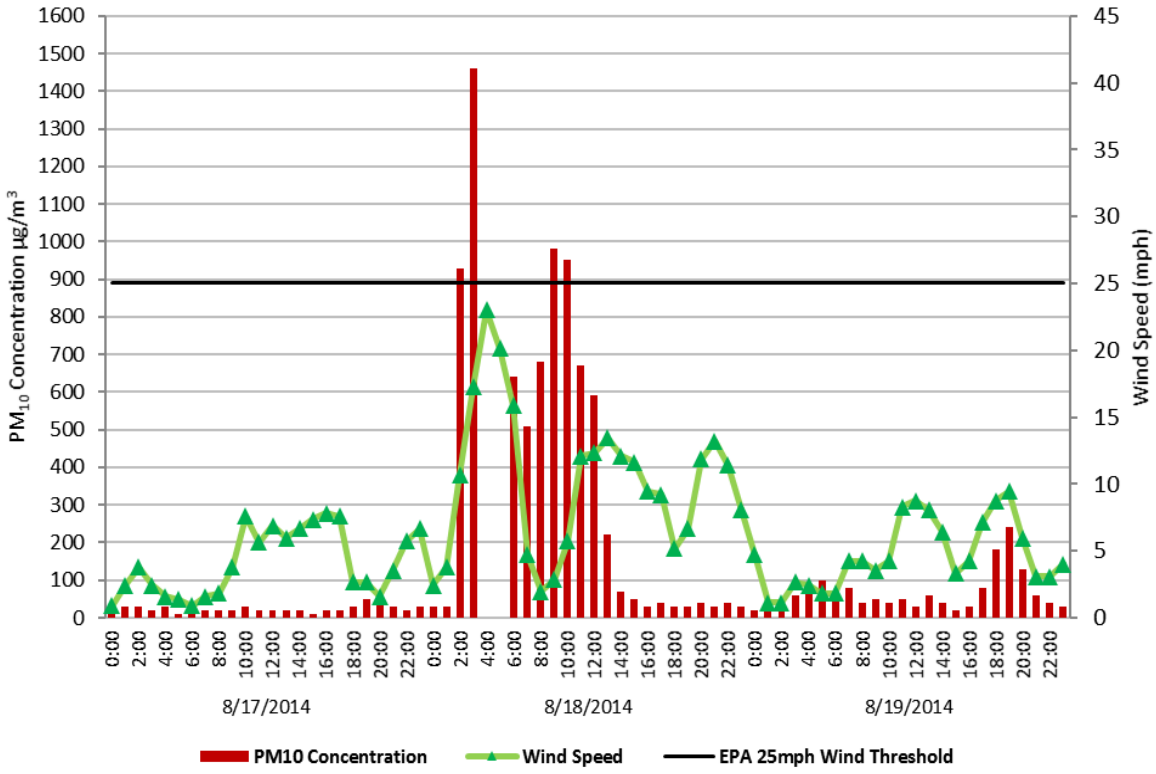


Fig C-4: Wind data is from Palm Springs Airport (KPSP)

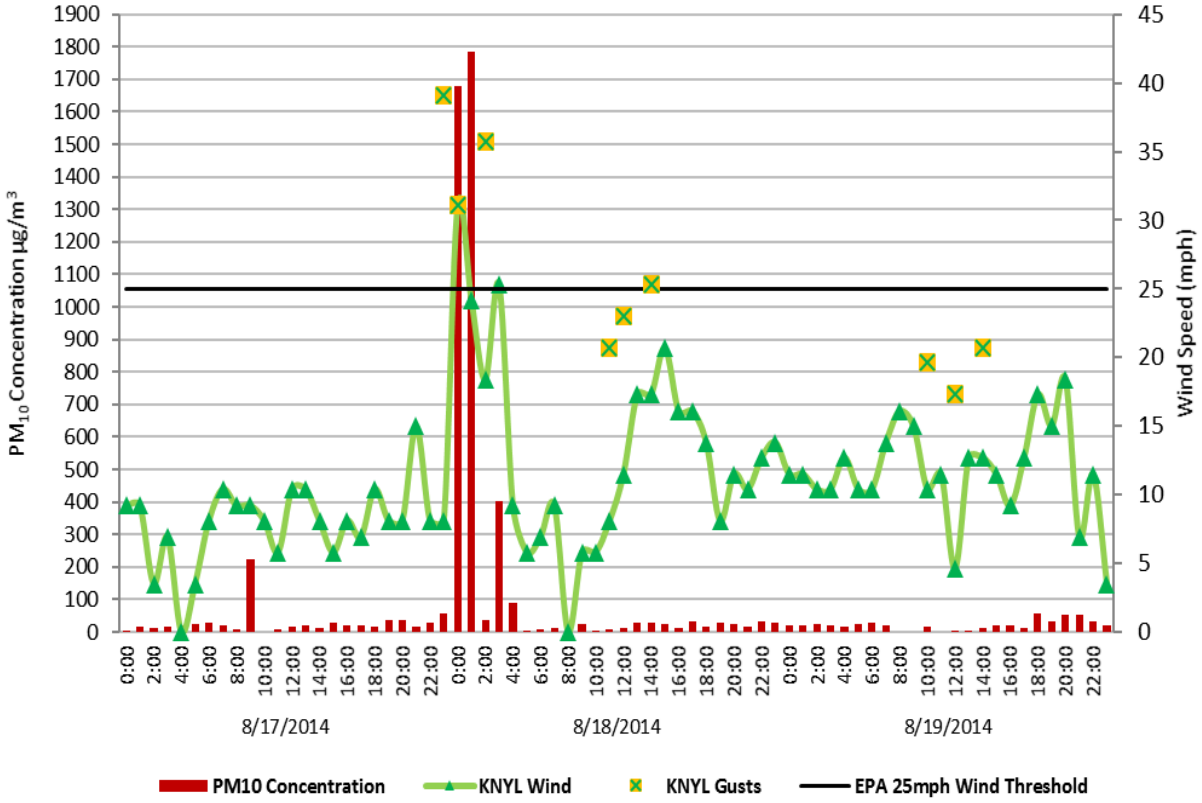
FIGURE C-5
TORRES-MARTINEZ TRIBAL
PM_{10} CONCENTRATIONS AND WIND SPEED CORRELATION



Figs C-3 through C-5: Monitoring sites in eastern Riverside County saw corresponding increases in particulate matter as wind speedS increased during the day, demonstrating the regional impact of the wind event on August 18, 2014.

YUMA, ARIZONA MONITORING SITE

FIGURE C-6
YUMA, ARIZONA SUPERSITE
PM_{10} CONCENTRATIONS AND WIND SPEED CORRELATION



Figs C-6: The Yuma, Arizona Supersite located in southwestern Arizona saw corresponding increases in particulate matter as wind speed increased during the day, demonstrating the regional impact of the wind event on August 18, 2014